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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,815	11/17/2003	Hiroyuki Yoshimura	FUJI:285	2158

7590 07/15/2005

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EXAMINER

FIGUEROA, NATALIA

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,815

Applicant(s)

YOSHIMURA ET AL.

Examiner

Natalia Figueroa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-23 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/17/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 17 November 2003 (11/17/2003) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al (JP 2000-067433), hereinafter Hamada in view of Hamano et al (US Pub. No. 2002/0081018), hereinafter Hamano.

RE claim 1, Hamada discloses a master disk device for transferring magnetic patterns to

both sides of a magnetic recording medium, comprising a first master disk having a first magnetic pattern formed on one side thereof for transferring the first magnetic pattern to one side of the magnetic recording medium (abstract, drawing 1 and [0020]); and a second master disk having a second magnetic pattern formed on one side thereof for transferring the second magnetic pattern to the other side of the magnetic recording medium (abstract, drawing 1 and [0020]). Hamada fails to explicitly teach that each of the first and second master disks has at least two alignment marks disposed outside the region of the magnetic pattern.

However, Hamano discloses such alignment mark in ([0028 and 0030-0033]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the device as disclosed by Hamada with the above teachings from Hamano, the motivation being in order to produce a magnetic transfer method in which a recordable medium would be aligned with a master medium by use of position marks that do not affect the data being transferred, hence maximum data transfer and minimum error.

RE claim 2, the combination of Hamada and Hamano is relied upon for the same reasons of rejection as stated above. Hamano further discloses that the alignment marks of each of the master disks are symmetrically disposed with respect to predetermined reference points of the respective magnetic pattern (fig. 1 and page 2, [0030-0033] and page 5, [0105-0107]).

RE claim 5, Hamano further discloses that the alignment marks of at least one of the first and second master disks are positioned on the same side where the magnetic pattern is formed (page 2, [0030-0033] and page 5, [0105-0107]).

RE claim 6, Hamano further discloses that the alignment marks of the other of the first and second master disks are positioned on the side opposite where the magnetic pattern is formed (page 2, [0030-0033] and page 5, [0105-0107]).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada and Hamano in view of Matsuda et al (USPN 6,721,113), hereinafter Matsuda.

RE claim 3, Hamada and Hamano are relied upon for the same reasons of rejection as stated above. Hamada and Hamano fail to explicitly teach the alignment marks of the first master disk and the alignment marks of the second master disk have complementary configurations.

However, Matsuda discloses such in (col. 2, lines 56-64). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to improve the device as disclosed by Hamada and Hamano with the above teachings from Matsuda, the motivation being in order to produce a magnetic transfer method in which a recordable medium would be aligned with a master medium by use of position marks that do not affect the data being transferred, hence maximum data transfer and minimum error.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada, Hamano and further in view of Ikeda et al (JP 2002-197647), hereinafter Ikeda.

RE claim 4, Hamada and Hamano are relied upon for the same reasons of rejection as stated above. Hamada and Hamano fail to explicitly teach that the master disks are optically transparent or semi-transparent.

However, Ikeda discloses such in (abstract). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time the invention was made to improve the device as disclosed by Hamada and Hamano with the above teachings from Ikeda, the motivation being in order to produce a magnetic transfer method in which the data being transferred is less affected by interference and the accuracy of the magnetic patterns is heightened, hence maximum data transfer and minimum error.

Allowable Subject Matter

7. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 10-23 are allowed.

9. The following is an examiner's statement of reasons for allowance:

RE claim 10, the prior art of record, and in particular Hamada et al (JP 2000-067433) fails to teach or suggest an alignment device comprising a first stage for movably and rotatably holding one of the first and second master disks; a second stage for movably holding the magnetic recording medium between the first and second master disks, wherein the first and second master disks are positioned with the magnetic pattern sides thereof facing the magnetic recording medium; and observing means for observing the positions of the alignment marks of the first and second master disks and an end surface position of an inner periphery or an outer periphery of the magnetic recording medium.

RE claim 18, the prior art of record, and in particular Hamada et al (JP 2000-067433) fails to teach or suggest an alignment method comprising positioning the first master disks next to the second master disk so that the first and second magnetic patterns face each other; moving

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or rotating, or both, one of the master disks that is transparent or semi-transparent relative to the other while observing the alignment marks of the first and second master disks with first observing means to align the alignment marks of the first and second master disks; positioning the magnetic recording medium between the first and second master disks; observing with second observing means the alignment marks of the master disks and an inner peripheral or outer peripheral end surface of the magnetic recording medium; and moving the magnetic recording medium with respect to the aligned first and second master disks based on observation results of the second observing means.

RE claim 21, the prior art of record, and in particular Hamada et al (JP 2000-067433) fails to teach or suggest an alignment method comprising fixing the position of one of the first and second master disks; observing the alignment marks of the one master disk with observing means; movably positioning the magnetic recording medium next to the one master disk with the magnetic pattern side of the one master disk facing the magnetic recording medium; observing with the observing means, an inner peripheral or outer peripheral end surface of the magnetic recording medium positioned next to the one master disk; moving the magnetic recording medium with respect to the one master disk based on observation results of the observation of the alignment marks of the one master disk and the magnetic recording medium to align the magnetic recording medium with respect to the one master disk; movably and rotatably positioning the other of the master disks next to the magnetic recording medium so that the magnetic recording medium is positioned between the first and second master disks and the magnetic pattern side of the other master disk facing the magnetic recording medium; observing with the observing means the alignment marks of the other magnetic disk; and moving or

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rotating or both the other master disk with respect to the one master disk based on the observation results of the alignment marks of the one master disk and the other master disk to align the marks of the first and second master disks.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554. The examiner can normally be reached on Monday - Thursday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


NFM


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